

III. REMARKS

1. Claims 1-23 remain in the application.
2. The specification has been amended to add headings in compliance with US practice.
3. The Abstract of the Disclosure has been amended to comply with MPEP 608.01(b).
4. Applicants respectfully submit that claims 1-5, 8, 11-13, and 16-19 are not anticipated by Mills, Jr. (US 6,665,529, "Mills").

Mills fails to disclose or suggest storing data on an IC card for connecting at least one access point to a functional connection with the fixed network part, coupling the IC card into a functional connection with the access point in response to a need to connect the access point to the fixed network part, and connecting necessary resources of the fixed network part to a functional connection with the access point on the basis of said stored data, as recited by claim 1.

Mills also fails to disclose or suggest that an access point is arranged to use an IC card, onto which is stored data for connecting at least one access point to a functional connection with the fixed network part, and the access point and the fixed network part are arranged to connect necessary resources of the fixed network part to a functional connection with the access point on the basis of said stored data, as recited by claim 11.

Mills further fails to disclose or suggest an access point that comprises card means for coupling an IC card to the access point and for reading data on the IC card, and that the access point

comprises control means and transceiver means for setting up a functional connection to required resources of a fixed network part on the basis of the data stored on the IC card, as recited by claim 16.

The present invention is directed to connecting access points to other network elements in a wireless telecommunications system. The invention is based on the idea of using IC cards (Integrated Circuit) for access points. Data for functionally connecting an access point to a fixed network part is stored on the IC card. When an access point is to be connected to a fixed network part, the IC card is functionally coupled to the access point. Necessary resources of the fixed network part are connected in a functional connection with the access point on the basis of the data stored on the IC card.

The invention is advantageous in that new access points such as base stations, radio network controllers or entities comprising the base station and a radio network controller, can be more easily connected to other network elements, since the necessary data is already stored on the IC card. Having the IC card at the access point offers an operator a chance assign the management of the access points to a selected party or to purchase the services offered by the access points. This significantly decreases the maintenance work required and allows operators to concentrate more on services offered by the core network. For instance, mobile base stations may be easily used and connected to a core network.

In contrast, Mills describes how an authentication procedure can be carried out in a public land mobile network (PLMN) such as a GSM network. The procedure utilizes a subscriber identify module (SIM) stored in an IC card. This IC card is used in a terminal

device, i.e. the GSM mobile station (see e.g. column 4, l. 61-67). The IC card according to Mills is used in an ordinary way in the SIM for authenticating the mobile station in the GSM core network. The authentication is done by the mobile switching centre (MSC) on the basis of a comparison of the signed response (SRES) from the SIM to the SRES from the authentication centre, see column 55-64. If the mobile station is authenticated, calls can be originated and received by the mobile station via the GSM network.

Mills does not disclose storing data on an IC card for connecting at least one access point to a functional connection with the fixed network part.

Instead, Mills discloses storing the SIM in the IC card. The SIM merely contains information for identifying the subscriber and for authenticating the mobile station in the network, i.e. facilitating the call set up for the mobile station. The SIM has no data for connecting an access point to a functional connection. In fact, there is no disclosure in Mills related any specific method or means for connecting an access point to other network elements in a wireless telecommunication system at all. Miller only describes a method of connecting a terminal device, the GSM mobile station, to a mobile network.

Mills does not even hint or suggest coupling the IC card to a functional connection with the access point in response to a need to connect the access point to the fixed network part. There is nothing in Mills that discloses or implies using an IC card with an access point, or more specifically for connecting an access point to other network elements (for instance to a mobile switching centre of a GSM network). Mills only discloses coupling the IC card to the mobile station.

Applicants respectfully submit that, as described by Mills, the SIM card cannot be considered as having a functional connection with a base station as claimed by the Examiner, since only the mobile station maintains a connection with a base station. Information (the random number RAND) is transmitted from the MSC in the core network to the mobile station which then forwards it to the IC card. Therefore, the IC card does not maintain any connection to any network element but merely communicates with an entity in the mobile station. Further, the term "access point" is clearly defined on page 1, line 30 through page 2, line 5, of the present specification and refers to a network element participating in offering a wireless connection to a terminal. It is to be further noted that the base station needs to be connected to the fixed network in Mills before the mobile station can be authenticated in order to be able to transmit the random number to the mobile station (in order to arrange authentication). For these reasons, contrary to the Examiner's views in the beginning of page 3 of the Official Action, Applicants submit that the IC card is not coupled to a functional connection with an access point. There is no indication in Mills towards connecting resources of the fixed network part to a functional connection with the access point on the basis of data stored in an IC card, or more specifically in an IC card functionally coupled to the access point.

On the basis of the above arguments, the present method for connecting an access point is novel and involves an inventive step in view of Mills. At least for these reasons, Applicants respectfully submit that independent claims 1, 11, and 16, and dependent claims 2-5, 8, 12, 13 , and 17-19 are not anticipated by Mills.

5. Applicants respectfully submit that claims 6, 7, 9, 10, 14, 15, and 20-23 are patentable over the combination of Mills in view of Widegren et al. (US 6,374,112, "Widegren").


Widegren fails to disclose or suggest the features of claims 1, 11, and 16 missing from Mills as argued above. Thus, the combination of Mills and Widegren does not disclose or suggest all the features of the independent claims.

Widegren describes a method of providing flexible radio access and resource allocation in a Universal Mobile Telecommunication System (UMTS). Widegren merely describes that base stations and radio network controllers provide a UMTS system but has no indication of applying IC cards to such an application. Therefore, the combination of Mills and Widegren does not render claims 6, 7, 9, 10, 14, 15, and 20-23 unpatentable.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


Joseph V. Gamberdell, Jr.
Reg. No. 44,695


Date

Perman & Green, LLP
425 Post Road
Fairfield, CT 06824
(203) 259-1800
Customer No.: 2512

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